

CLAIM AMENDMENTS

1-51 (Cancelled)

52. (New) An intraocular device for implanting within a patient's eye, the device including an optic member for location in the eye such that the patient sees through the optic member, and means for altering the shape of the optic member to alter its focussing power and thereby alter the focus of the patient's eye.

53. (New) An intraocular device according to claim 52, wherein the optic member is configured for location in front of the normal lens of the eye.

54. (New) An intraocular device according to claim 52, wherein the optic member is configured for location outside the capsular bag which contains the normal lens of the eye.

55. (New) An intraocular device according to claim 52, wherein the shape of the optic member is alterable between a relaxed shape in which it provides substantially no focussing effect and a focussing shape in which it provides between 3 and 6 dioptres of focussing power.

56. (New) An intraocular device according to claim 55, wherein in the focussing shape, the optic member is convex on at least one side.

57. (New) An intraocular device according to claim 55, wherein the optic member is caused to alter its shape from the relaxed to the focussing shape in response a stimulus which causes focussing of the lens of a normal young eye.

58. (New) An intraocular device according to claim 57, wherein the extent of change in shape and focussing effect of the optic member is a function of the magnitude of the stimulus, for example the extent of the contraction of the ciliary muscle.

59. (New) An intraocular device according to claim 52, wherein the intraocular device includes a fluid reservoir.

60. (New) An intraocular device according to claim 59, wherein the optic member includes a central cavity which is in communication with the fluid reservoir.

61. (New) An intraocular device according to claim 60, wherein the means for altering the shape of the optic member includes means for causing fluid to move from the reservoir into or out of the central cavity of the optic member.

62. (New) An intraocular device according to claim 61, wherein the device is configured such that fluid moves into the cavity in response to contraction of the ciliary muscle.

63. (New) An intraocular device according to claim 62, wherein the amount of fluid moving into the cavity is a function of the extent of contraction of the ciliary muscle and may be proportional thereto.

64. (New) An intraocular device according to claim 63, wherein the cavity is defined within walls which are biased into a position in which the cavity contains substantially no fluid, but which may flex into a position in which the cavity contains fluid, and wherein fluid is caused to move from the cavity into the reservoir in response to relaxation of the ciliary muscle, allowing the bias of the walls of the cavity to force the fluid back into the reservoir.

65. (New) An intraocular device according to claim 64, wherein the walls of the central cavity includes an anterior wall and a posterior wall between which the central cavity is defined, the anterior wall comprising a flexible, substantially transparent membrane which in an unstressed condition is substantially planar, and the posterior wall comprising a planar, transparent rigid member.

66. (New) An intraocular device according to claim 65, wherein when there is substantially no fluid in the cavity, the anterior and posterior members lie substantially adjacent to one another, causing the central cavity to have substantially no volume.

67. (New) An intraocular device according to claim 65, wherein when fluid is present in the reservoir, the anterior wall flexes

away from the posterior wall, into a convex shape and wherein the anterior wall has a sufficient degree of elasticity and elastic memory that it returns to its unstressed, planar condition on relaxation of the ciliary muscle.

68. (New) An intraocular device according to claim 60, wherein the intraocular device further includes a conduit which provides a fluid connection between the central cavity in the optic member and the reservoir.

69. (New) An intraocular device according to claim 68, wherein the conduit comprises a capillary tube connecting the reservoir and the cavity.

70. (New) An intraocular device according to claim 59, wherein the reservoir is configured for location adjacent to ciliary muscle in the ciliary sulcus of the patient's eye.

71. (New) An intraocular device according to claim 70, wherein the reservoir is shaped such that when it is in place adjacent the ciliary muscle, contraction of the ciliary muscle causes the compression of the reservoir, thus forcing fluid to the cavity in the optic member.

72. (New) An intraocular device according to claim 70, wherein the reservoir includes a peripheral part which abuts against the ciliary muscle, the peripheral part being flexible, and a base part, the peripheral part and base part together defining a chamber for the fluid, the base part being substantially rigid.

73. (New) An intraocular device according to claim 72, wherein the reservoir is configured such that contraction of the ciliary muscle causes compression of the peripheral part, thus forcing fluid from the reservoir into the central cavity of the optic member.

74. (New) An intraocular device according to claim 73, wherein the device includes two reservoirs which are configured to be diametrically opposed, for example in top and bottom regions of the ciliary sulcus of eye, each reservoir being connected to the optic member via a capillary tube.

75. (New) An intraocular device according to claim 52, wherein the optic member is configured for location in the region of the eye to the rear of the iris.

76. (New) An intraocular device according to claim 52, wherein the optic member is configured to locate in front of the iris of the eye.

77. (New) An implant for insertion into a patient's eye, the implant including an artificial lens and an intraocular device according to claim 52, the artificial lens and the optic member of the intraocular device being positioned in the line of sight such that the patient sees through both.

78. (New) An implant according to claim 77, wherein the optic member covers a central part of the anterior surface of the artificial lens.

79. (New) An implant according to claim 77, wherein the optic member is fused with the central part of the artificial lens.

80. (New) An implant according to claim 77, wherein the intraocular device is configured for location in the ciliary sulcus of the eye, between the lens and the iris.

81. (New) An implant according to claim 77, wherein the intraocular device is configured for location outside the capsular bag, behind the iris, in contact with the ciliary muscle, in a position to be compressed by the contracting ciliary muscle.